

Wilderness Politics in the American West

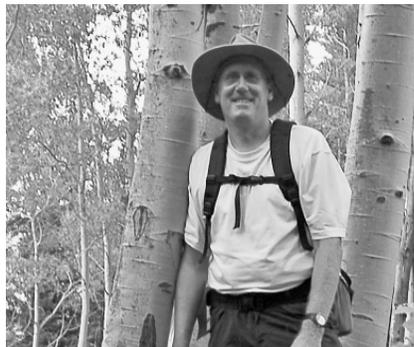
Rural Community Perspectives on Roadless Lands

BY LAURIE YUNG, WAYNE FREIMUND, and
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Abstract: Conflict over roadless public lands is a fixture of western politics, but very little is known about the views of rural residents on how to best manage these lands. Survey research on the Rocky Mountain Front in central Montana indicates that residents are evenly divided and polarized regarding whether roadless lands should be protected or developed. Views on roadless lands predict views on environmental quality, wilderness, government regulation, use of natural resources, and oil and gas development. Length of residence was not related to views on roadless lands, suggesting that current theories about in-migration resulting in “greener” public opinion may be unfounded.



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Wilderness Designation, Roadless Lands, and Rural Communities

Wilderness designation and the management of roadless lands are contentious issues in the American West. The National Wilderness Preservation System currently includes 107 million acres (43.3 million ha) of federal land, but conflict over 58 million acres (23.4 million ha) of roadless Forest Service lands continues. Although these roadless lands are undeveloped and eligible for wilderness designation under the Wilderness Act, such areas have not, until recently, enjoyed any legal protection as conservation areas. Although management of roadless lands has historically been determined by individual Forest Plans,

such plans are amended and revised; thus, Forest Plans can adopt new priorities as personnel and national policy change (e.g., wilderness designation can change Forest Plans at any time). National Forest planning allows for considerable agency discretion, but does not provide stakeholders with much certainty or predictability regarding the long-term management of roadless lands. Even the Roadless Area Conservation Rule (36 CFR 294), adopted in 2001 to eliminate road building and logging on these lands, has been repeatedly altered by changing administrations and continued litigation, first replaced by a state petition process in 2005 and then reinstated by a federal judge in 2006.

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In a political climate that is sometimes antagonistic to wilderness, members of Congress often depend on a strong local voice for wilderness to justify additional designations. Wilderness bills currently proposed for Idaho, Utah, and California are based on agreements negotiated by diverse stakeholders at the local level in rural communities in close proximity to affected federal lands. These negotiated agreements include wilderness designation in a larger legislative package that can include land conveyances, off-road vehicle recreation areas, protection of grazing leases, and funds for local economic development (e.g., the proposed Central Idaho Economic Development and Recreation Act).

The involvement of rural communities in wilderness designation is part of a larger trend emphasizing local community participation in federal land management. The involvement of rural communities, oftentimes through collaborative multistakeholder processes, is believed to produce longer-lasting, more equitable, politically feasible solutions that are based on local knowledge, needs, and conditions (Wondollek and Yaffee 2000). However, some conservation groups oppose locally negotiated legislative proposals, arguing that the compromises involved are unacceptable and that nonlocal viewpoints are not adequately incorporated (McCloskey 1996). The underlying assumption of these critiques is that western, rural communities are less likely to support wilderness designation or protection of roadless lands when compared with their urban or nonwestern counterparts.

Recent surveys of westerners find strong support for environmental protection and for wilderness (see Durrant and Shumway 2004; Nie 1999; Rudzitis and Johansen 1991). However, there is significant disagreement regarding the environmental values of rural and urban

westerners, respectively. Brunson and Steele (1996) found that urban residents were more likely to support conservation and protection of federal lands as compared with rural residents. However, Fortmann and Kusel (1990) argued that differences between rural and urban residents have been exaggerated. Fortmann and Kusel found that rural residents tend to favor environmental protection in general, but do not support wilderness as much as their urban counterparts. A more sophisticated understanding of the views of western, rural residents with regard to the development or protection of roadless public lands is critical to constructive public debate and effective policy making, and particularly important given the growing role of local collaborative processes in federal wilderness designation.

The Study Site

The Rocky Mountain Front in north-central Montana, a dramatic landscape where the Rocky Mountains meet the Great Plains (see figure 1), is a largely undeveloped area of ranches, public lands, and rural communities. In contrast to many fast growing rural counties in the American West, Teton County, the largest county in the area, has a fairly stable population of 6,400. The Lewis and Clark National Forest lies to the west and includes 365,000 acres (147,773 ha) of the Bob Marshall Wilderness Complex and 200,000 roadless acres (80,971 ha).

During the last 20 years, the Rocky Mountain Front has been the focus of numerous national debates about the future of oil and gas development. The Front is particularly important to conservation groups, who emphasize its unique ecological features, undeveloped nature, and large wilderness complex (see figure 2). Local and national-level conflict over the development of nat-

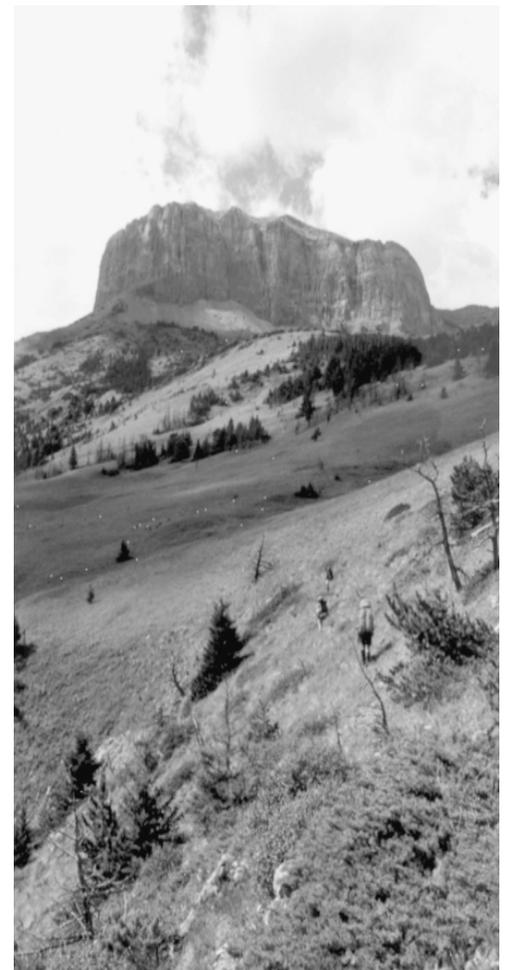


Figure 1—Hiking toward Old Man of the Hills, Rocky Mountain Front, Montana. Photo by Laurie Yung.

ural resources in the area has been continuous, contentious, and highly politicized. During the 1980s, several bills designating portions of the Rocky Mountain Front as wilderness were considered by Congress (one of these bills passed and was later vetoed). In 2006, Congress banned future oil and gas development on federal lands in the area. However, conservationists remain concerned about motorized recreation, and continue to advocate for wilderness designation of roadless lands.

Methods

The Community Land Use Survey, described below, was conducted in collaboration with Teton County and the Growth Policy Citizen's Advisory Committee, a group of farmers,



Figure 2—Near North Fork of Dupuyer, Rocky Mountain Front, Montana. Photo by Laurie Yung.

ranchers, county staff, and other community leaders tasked with recommending growth management policies to Teton County commissioners. Although the overall purpose of the survey was to understand community views on rural change, private lands, and growth management, we included a number of questions about public lands, government regulation, environmental quality, and the development of natural resources. The survey was mailed to a random sample of registered voters in Teton County during January and February 2002 (approximately 80% of adult residents of Teton County are registered to vote). Surveys were completed and returned by 83% of recipients (a total of 469). Survey results, although dating from 2002, provide a window into local views in the ongoing debate over roadless lands.

Results

We examined responses to nine questions about public lands, wilderness, development of natural resources, and environmental quality to better understand local community views on development and protection of roadless lands. We also looked at the relationship between responses to these questions and five demographic variables.

Previous interviews with 74 respondents indicated that the word wilderness was highly politicized and contentious. To avoid knee-jerk reactions while eliciting views about the lands eligible for wilderness designation, we worded several questions in the survey to describe the development of natural resources or protection of roadless lands without using the term wilderness. We recognize that the questions we explore below might have produced different responses had they been worded to inquire more directly about support for additional wilderness designation.

To gauge views on roadless lands, respondents were asked to agree or disagree with the following statement:

Public lands on the Rocky Mountain Front should be maintained in their current roadless, undeveloped condition (we used a 6-point scale with 1 labeled as strongly disagree and 6 labeled as strongly agree). Respondents were almost evenly divided in their opinions about roadless lands and results followed a U-shaped distribution (see figure 3), with 34% of respondents falling into the pro-roadless group (defined as respondents who selected 5 or 6) and 36% falling into the pro-development group (defined as respondents who selected 1 or 2). Approximately 25% of respondents fell into the middle of this distribution (selecting 3 or 4), 3% selected don't know, and 2% skipped the question; these respondents were not included in the following analysis. We considered 3 and 4 on a 6-point scale to represent neutral views, and, thus, could not justify placing these respondents in the pro-roadless or pro-development groups.

In the following analysis, we first determined whether responses to the roadless question predict responses to other key questions, to better understand how views on roadless lands might be related to other environmental opinions. Then, using the same set of variables, we performed an analysis to determine how many clusters,

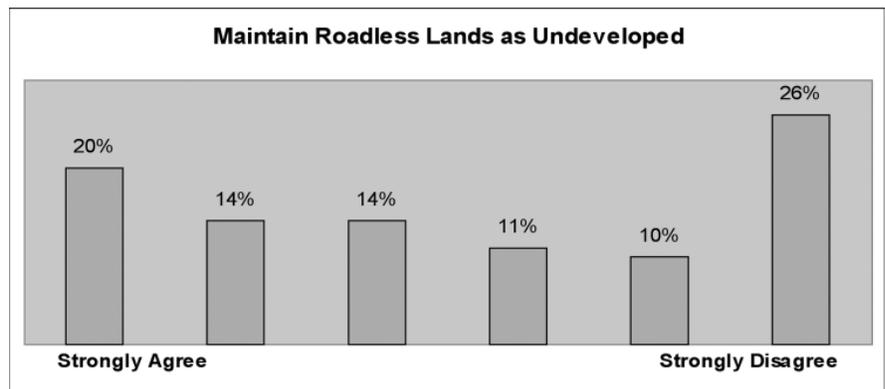


Figure 3—The distribution of agreement, as a percentage of all responses, to the statement, “Public lands on the Rocky Mountain Front should be maintained in their current roadless, undeveloped condition.”

Rural communities along the Rocky Mountain Front were evenly divided and somewhat polarized in their views of roadless lands.

or groups, were present in the data, to see if the polarization of responses to the roadless question is indicative of an overall division of respondents into two groups. In the first analysis, given the absence of a normal distribution, we used permutation tests (Davison and Hinkley 2003) with two different statistics: the mean responses for the two groups and the proportion of respondents answering 5 or 6 on the question. Permutation tests answer the following question: How likely is the measured value of the test statistic if the group labels are unimportant? To answer this question, we first calculate the value of the test statistic for the data labeled correctly. We then randomly permute the labels 2,000 times, calculating the test statistics with each new permutation. At this point, we can ask how extreme the real test statistic is compared to the permutation values. The measure of this extremity is the p-value. In other words, the p-values are the answer to the following question: If there is no relationship between group membership (whether respondents fall into the pro-roadless and pro-development group) and responses to other questions (e.g., questions about government regulation or environmental quality), what is the probability of getting a test statistic as extreme or more extreme than the one observed? Because this analysis involved multiple comparisons, a Bonferroni correction was performed, multiplying the resulting p-value by the number of comparisons. The permutation test was chosen because it allowed natural choices of

test statistics such as “the proportion of people who strongly agree” with a given statement.

We also performed a cluster analysis on the same variables used above using the Partitioning Around Medoids (PAM) method (Kaufman and Rousseeuw 1990) and a customized version of their distance algorithm DAISY. To determine the number of clusters we modified the gap statistic procedure described by Tibshirani et al. (2001). The cluster analysis produced two clusters that almost evenly divided the respondents. These clusters overlapped 90% with the pro-roadless and pro-development groups described above. Thus, the question about the development of roadless public lands predicted the groupings in the data found by the cluster analysis.

The pro-roadless group disagreed that natural resources should be used to fuel economic growth, that oil and

gas development would be good for local communities, and that government regulation should be kept to a bare minimum (see table 1). The pro-development group generally agreed with these statements. Table 1 indicates the percentage of each group that agreed or strongly agreed with specific opinion statements. For example, 48% of pro-roadless respondents agreed or strongly agreed with the first statement (that natural resources should be used to fuel economic growth), whereas 86% of the pro-development group agreed or strongly agreed with this statement. For all but one of the opinion statements in table 1, permutation tests revealed that there is a less than 0.008 probability of getting a difference this extreme if the group labels were randomly assigned.

Furthermore, the pro-roadless group rated environmental quality and wilderness as more important, and the development of natural resources as less important when compared with the pro-development group (see table 2). However, please note that the two groups were much more divided on wilderness than on the development of natural resources. Clearly many of the pro-roadless respondents believe that

Table 1. Pro-roadless and pro-development responses to opinion statements about development, regulation, and national forest management

Statement	Proportion of Pro-roadless	Proportion of Pro-development	P-value
Natural resources should be used to fuel economic growth.	48%	86%	< 0.008
Oil and gas development would benefit local communities.	47%	87%	< 0.008
Government regulation in Teton County should be kept to a bare minimum.	56%	76%	< 0.008
There is too much government regulation in Teton County.	24%	35%	< 0.70
The Lewis and Clark National Forest does a good job managing forest lands.	45%	18%	< 0.008

the development of natural resources is important, but do not want to see such development on public roadless lands. Table 2 indicates the percentage of each group that rated a particular feature or activity as very important in guiding the future of Teton County. For example, 84% of pro-roadless respondents reported that “environmental quality” was very important, whereas only 53% of the pro-development group said that it was. For each of the features in table 2, permutation tests revealed that there is a less than 0.008 probability of getting a difference this extreme if the group labels were randomly assigned.

We also performed permutation tests on demographic variables. These tests were evaluated based on the difference between means for the two groups based on sex, age, education, length of residence in the area, size of childhood community, and whether or not the respondent used wilderness for recreation. There were no significant differences for any of these variables.

Discussion and Implications

Critics of locally negotiated legislative proposals for public lands in the West often assume that rural communities oppose wilderness designation or protection of roadless lands. In this study, we found that rural communities along the Rocky Mountain Front were evenly divided and somewhat polarized in their views of roadless lands. Furthermore, the issue of roadless lands was much more divisive than other environmental issues. In comparison,

Feature or Activity	Proportion of Pro-roadless	Proportion of Pro-development	P-value
Environmental quality	84%	53%	< 0.008
Wilderness	74%	27%	< 0.008
Development of natural resources	52%	82%	< 0.008

there was widespread agreement among survey respondents on the importance of controlling invasive, nonnative plants, and on the need to regulate development of private lands. Not only do residents have strong views about the future of roadless lands, opinions about roadless lands are related to views on environmental quality and development of natural resources. In short, with regard to public lands, residents along the Rocky Mountain Front are evenly divided into two groups with largely opposite views about how roadless lands should be managed into the future.

The changing demographics of the American West might seem a logical explanation of this polarization. Durrant and Shumway (2004) argue that in-migration of “greener” newcomers to the rural West may be shifting environmental values in favor of preservation. However, our findings indicate that, at least in some rural communities, length of residence does not predict support for roadless lands, since newer residents and long-term residents did not differ in their responses to this question. Furthermore, the size of community in which resi-

dents grew up was not related to support for roadless area preservation, indicating that the so-called urban-rural divide might not be as pronounced as suspected.

Public lands have been particularly contentious and politicized on the Rocky Mountain Front for the last 20 years, perhaps as a result of long-term national attention to the area (Yung et al. 2003). However, even less publicized roadless lands have long inspired local and national debate. So long as roadless lands remain in limbo, rural communities and wilderness advocates face a climate of uncertainty and conflict. Forest Plans provide a mechanism for integrating local views into management priorities, but do not provide long-term certainty regarding management direction. Although the Roadless Area Conservation Rule attempted to resolve the long-standing debate over the future of roadless areas, the rule can be changed by subsequent administrations. Administrative policy often changes as the political pendulum in Washington, D.C., swings to and fro, adding to the sense of uncertainty and further exacerbating conflict. In this context, do locally negotiated legislative proposals provide a way to move forward?

For rural residents, local proposals might provide a means to integrate local needs into a larger legislative package. On the Rocky Mountain Front, many residents who want roadless lands

In some rural communities, length of residence does not predict support for roadless lands, since newer residents and long-term residents did not differ in their responses to this question.

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protected support development of natural resources on other lands, a view that provides important common ground for negotiations. Wilderness advocates might be less apprehensive of locally negotiated proposals for places such as the Rocky Mountain Front with the knowledge that half of local residents support protection of roadless lands.

Even with improved understandings of local views, policy makers still face the difficult question of how to balance local, regional, and national perspectives when considering future policy options. Locally negotiated legislative proposals may offer a mechanism to meet a variety of local needs while providing certainty about the future management of roadless lands. However, local collaboration does not eliminate polarization; different views on roadless lands and wilderness will continue to exist at the local, regional, and national levels. Conflict over how to best manage roadless lands, and about who should decide their future, will undoubtedly continue to be a fixture of western and national politics. **IJW**

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